

REMARKS

After entry of this Amendment, the pending claims are: claims 20-55. The Office Action dated June 15, 2007 has been carefully considered. Claims 1-19 were previously canceled. Claims 20-23, 31, 32, 35-46 and 52-55 have been amended without prejudice to further clarify the invention. No new matter has been added. Reconsideration and allowance of the present application in view of the above Amendments and the following Remarks is respectfully requested.

In the Office Action dated June 15, 2007, the Examiner:

- rejected claims 20-55 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner rejected the claims for incorporating the word “homogenous;”
- rejected claims 32 and 38-55 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention;
- rejected claims 20-26 and 31, 33-46, 49-51 and 53 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,919,235 to Husson *et al.* (“Husson”); and
- rejected claims 27-30, 32, 47, 48, 52, 54 and 55 under 35 U.S.C. 103(a) as being unpatentable over Husson.

35 U.S.C. 112, FIRST PARAGRAPH REJECTION

Claims 20-55 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner rejected the claims for incorporating the word “homogenous.” Applicant has amended the claims to make explicit what was already implicit.

Specifically, Applicant has amended the claims to remove all reference to the word “homogenous” and instead has inserted wherein the flexible member is made from a single, integral member. As such, this rejection is believed to be moot. Withdrawal of this rejection is specifically requested.

35 U.S.C. 112, SECOND PARAGRAPH REJECTION

Claim 32 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the language in claim 32 that the width of the member decreases from a first point located between the ends to the interior ends was rejected as being unclear. It is respectfully submitted that claim 32 has been amended to depend from claim 20 as such this rejection is believed to be moot. Withdrawal of this rejection is specifically requested.

Claim 38-55 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the language in claim 38 was rejected for not clearly identifying which direction the width of the member decreases. Independent claim 38 has been amended to require, *inter alia*, wherein the member includes a first intermediate point located between the exterior and interior ends, the width of the member at the first intermediate point being greater than the width of the member at the distal interior end. It is respectfully submitted that, as amended, claim 38 clearly identifies that the width of the member at the first intermediate point is greater than the width of the member at the distal interior end. Withdrawal of this rejection is specifically requested.

INDEPENDENT CLAIM 20

Independent claims 20 and 38 were rejected under 35 U.S.C. 102(b) as being anticipated by Husson.

Independent claim 20 has been amended to require, *inter alia*, an intervertebral disk prosthesis comprising a longitudinal, flexible member, wherein the flexible member is made from a single, integral member having a length, a width and a longitudinal axis, the flexible member having a distal exterior end and a distal interior end extending between the length of the longitudinal axis of the member; wherein the member includes a first intermediate point located between the exterior and interior ends, the width of the member at the first intermediate point being greater than the width of the member at the distal interior end.

Similarly, independent claim 38 has been amended to require, *inter alia*, a prosthesis having a longitudinal central axis, the prosthesis comprising a longitudinal, flexible member, wherein the flexible member is made from a single, integral member having a length, the longitudinal, flexible member having a distal exterior end, a distal interior end and a cross-sectional width, the length of the prosthesis extending between the first and second distal ends, wherein the member includes a first intermediate point located between the exterior and interior ends, the width of the member at the first intermediate point being greater than the width of the member at the distal interior end.

Husson discloses a spirally-wound intervertebral prosthesis, wherein the prosthesis includes an elongated elastic body spirally wound about a cylindrical middle piece. That is, to enable the winding of

the prosthesis into a spiral shape, the prosthesis disclosed in Husson uses a cylindrical center piece to which the elastic body is attached and then wound around. Disadvantages associated with these known prosthesis include (a) the relatively large cylindrical center piece to which the elongated, spiral-shaped object is attached and (b) the transition, usually via a linking component, between the relatively large center piece and the relatively narrow tape. The linking component often having a smaller width which acts as a joint. (See page 1, line 9 to page 2, line 8).

The invention as claimed in independent claims 20 and 38 attempt to overcome these disadvantages by requiring an intervertebral disk prosthesis or nucleus prosthesis that does not require a cylindrical center piece about which the elongated prosthesis is wound.

It is respectfully submitted that Husson discloses an intervertebral prosthesis that includes a cylindrical center piece. More specifically, Husson discloses an elongated elastic body, which takes on the form of a spiral S, the elongated elastic body including a central middle part 1, a thin region 2, and a spiral turn 3. The central middle part 1, which is essentially in the form of a cylinder, is joined to the spiral turn 3 by a thin region 2 which provides a form-fitted transition between the central middle part 1 and the spiral turn 3. (See column 4, lines 28-33). The spiral turns 3 connected to the transition region 2 are form-fitted and have a constant breadth between 2 mm and 5 mm so that canting under the loads can be excluded to the greatest extent possible. (See column 4, lines 40-43). The elongated elastic body comprises preferably 2 to 4 turns, which is proof against canting. (See column 4, lines 43-44). This is followed by a transition region 4 in which the breadth of the elongated elastic body is reduced to such an extent that an easy separation is possible, e.g. in about the region 5. (See column 4, lines 44-47).

require by independent claim 20. Moreover, it is respectfully submitted that Husson does not disclose, teach, or suggest a flexible member made from a single, integral member having a length, the longitudinal, flexible member having a distal exterior end and a distal interior end, the length of the prosthesis extending between the first and second distal ends, as required by independent claim 38.

Rather, Husson discloses an elongated elastic body joined to a cylindrical central middle part via a transition region. Contrary to the Examiner's assertion, it is respectfully submitted, that part 2 can not be interpreted as the area of reduced thickness, as required by independent claim 20, since part 2 defines a transition region that interconnects the spiral turn 3 (*i.e.*, the elongated elastic body) to the central middle part 1. Part 2 is not part of the single, integral flexible member as required by independent claims 20 and 38.

Properly interpreted, Husson discloses a central middle part 1 that is connected to a thin region 2, wherein the thin region 2 acts as a joint for interconnecting the central middle part 1 to the spiral turn 3 (*i.e.*, the elongated elastic body). The spiral turn 3 having a constant cross-sectional width until transition region 4, wherein the spiral turn 3 may have a reduced cross-sectional width. Therefore, it is respectfully submitted that Husson does not disclose, teach, or suggest a prosthesis comprising a flexible member made from a single, integral member.

Moreover, in an effort to expedite prosecution of the present application, independent claim 20 has been amended, in accordance with the Examiner's suggestion, to require, *inter alia*, a longitudinal, flexible member, wherein the flexible member has a distal exterior end and a distal interior end

extending between the length of the longitudinal axis of the member. Similarly, independent claim 38 has been amended to require, *inter alia*, a longitudinal, flexible member having a length, the longitudinal, flexible member having a distal exterior end and a distal interior end, the length of the prosthesis extending between the first and second distal ends. As such, independent claims 20 and 38 have been amended to clearly identify where the interior and exterior ends start and end, at the distal ends of the flexible member, not in the middle of the prosthesis as interpreted by the Examiner.

Thus, for at least the above-identified reasons, it is respectfully submitted that Husson does not disclose, teach or suggest all of the limitations of independent claims 20 and 38. Thus, it is respectfully submitted that independent claims 20 and 38 are allowable over the cited prior art. Withdrawal of these rejections and allowance of independent claims 20 and 38 is respectfully requested.

Furthermore, as claims 21-36 all depend from independent claim 20, it is submitted that these claims are equally allowable. Withdrawal of these rejections and allowance of claims 21-36 is also respectfully requested.

Furthermore, as claims 39-55 all depend from independent claim 38, it is submitted that these claims are equally allowable. Withdrawal of these rejections and allowance of claims 39-55 is also respectfully requested.

INDEPENDENT CLAIM 37

Independent claim 37 has been rejected as being anticipated by Husson. Independent claim 37 requires, *inter alia*, an intervertebral disk prosthesis comprising a longitudinal, flexible member, wherein the flexible member is made from a single, integral member having a length and a longitudinal axis, the flexible member further including a distal exterior end and a distal interior end, the distal exterior end and the distal interior end extending between the length of the longitudinal axis of the member.

For at least the reasons identified above in connection with independent claims 20 and 38, it is respectfully submitted that Husson does not disclose, teach or suggest all of the limitations of independent claim 37. Thus, it is respectfully submitted that independent claim 37 is allowable over the cited prior art. Withdrawal of this rejection and allowance of independent claim 37 is respectfully requested.

CONCLUSION

No fee is believed due for this submission. If, however, the Commissioner determines otherwise, the Commissioner is authorized to charge any fees which may now or hereafter be due in this application to Deposit Account No. 19-4709.

In the event that there are any questions, or should additional information be required, please contact Applicant's attorney at the number listed below.

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Respectfully submitted,

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